Venema Creek Natural Drainage System Project

Creeks, Drainage & Wastewater Advisory Committee December 11, 2013

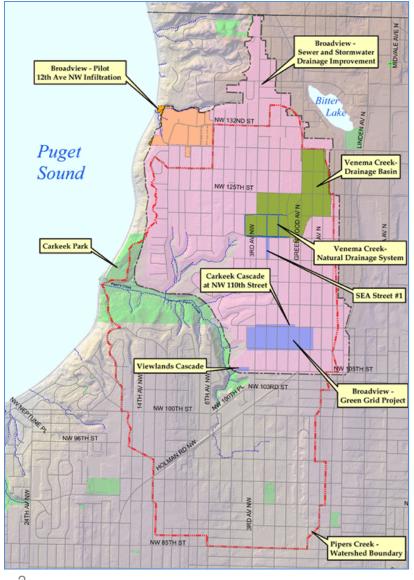


Venema NDS

- Geographical Context
- Project Basics: performance goals, funding, WMBE, RainWise
- Concept graphics
 - NDS w/underdrain & UIC concept
 - NW 120th Street
 - NW 122nd Street
- Recent Outreach History & Feedback
- Timeline
- Q&A



Projects within the Broadview Area



& Piper's Creek Watershed

- ✓ SEA Street #1
- ✓ Broadview Green Grid
- ✓ 12th Ave NW Infiltration (Pipe Grouting)
- ☐ Venema Creek Natural
 Drainage System
- ☐ Broadview Sewer and Drainage Improvements



Some Project Basics

- Performance goals: Water Quality & Retention
- Geography: lower end of the Venema Basin, five blocks of residential streets, completely rebuilt with new improvements
- Funding: SPU in partnership with a grant from the Washington State Department of Ecology (\$1M),
 Fee-in-Lieu from SDOT (\$728k)
- WMBE Participation: at design start, 30% goal, currently at ~45% expended and will exceed the 30%
- RainWise: Now Available to Venema Property Owners



Venema Creek Natural Drainage System



The Venema Natural Drainage System (NDS) Project will:

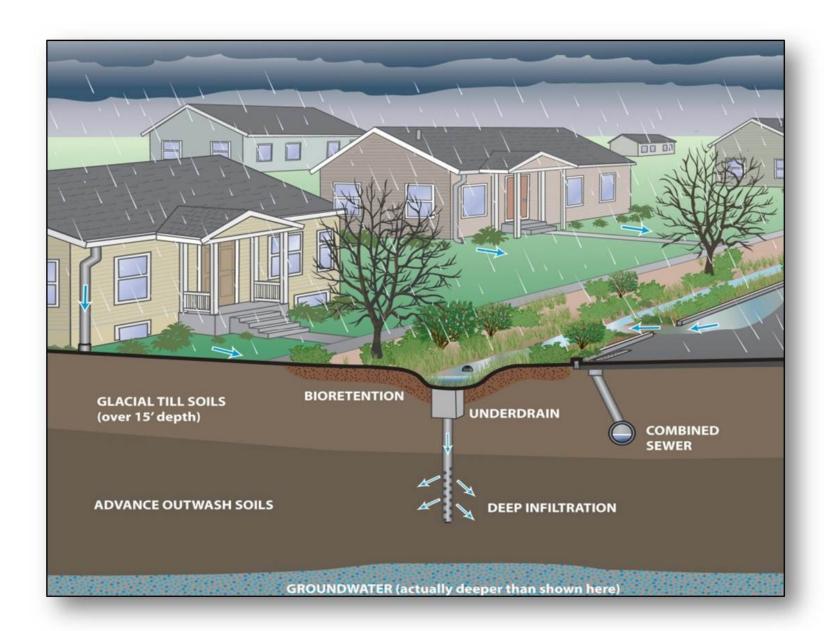
- Reconstruct five blocks of roadway to include natural drainage systems and planting improvements
- Improve the existing flow, character and pattern of stormwater infiltration
- Restore the natural hydrological cycle and improve salmon habitat
- Reduce the average annual volume of stormwater runoff while improving water quality
- Slow the flow and improve creek habitat quality
- Manage stormwater flow at the source

Project Benefits:

- Improves groundwater recharge and creek flow during dry months
- Slows traffic
- Increases pedestrian safety
- Adds green space







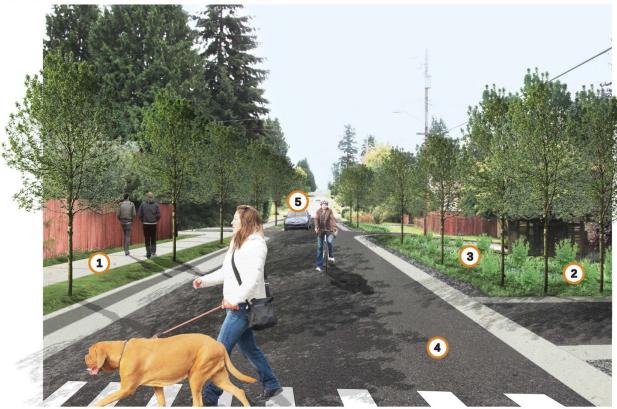


NW 120th Street – Pre-Existing





120th Conceptual Street Perspective



* Trees and plantings are shown at approximately one-year from planting.

- 1 Approximately 1600 feet of new sidewalk
- 2 Plants and trees within the natural drainage system will improve air and water quality. Residents will have the opportunity to provide input on plant selections.
- 3 SPU will maintain the landscaping in the natural drainage system to ensure proper storm drainage function
- 4 Defined roadway will calm traffic
- (5) On-street parking will be provided on one side of the street





NW 122nd Street – Pre-Existing





122nd Conceptual Street Perspective



 $\ensuremath{^{\star}}$ Trees and plantings are shown at approximately one-year from planting.

- 1 Approximately 1600 feet of new sidewalk
- Plants and trees within the natural drainage system will improve air and water quality. Residents will have the opportunity to provide input on plant selections.
- 3 SPU will maintain the landscaping in the natural drainage system to ensure proper storm drainage function
- 4 Defined roadway will calm traffic
- S On-street parking will be provided on one side of the street





Recent Outreach History

- Open House January 2013
- Direct Mailing / Letter July
- Door Knocks August
- One-on-One meetings, September Present
- Broadview Community Council October
- Carkeek Park Advisory Council October
- 60% Drop-in, Landscape Architecture Meetings -December
- Direct Mailings, Emails, Website ongoing
- Planned: Pre-Construction & Post-Construction
 Meetings



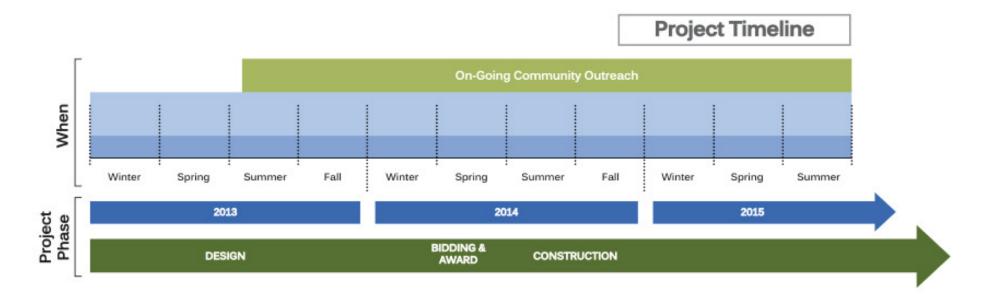
Concerns from the Public

(what we've heard ...)

- Aesthetics
- Maintenance
- Encroachments Issues
- Questions on Pollutants in Swales



Project Timeline



- Design through March 2013
- Bidding June 2013
- Award July 2014
- NTP August 2014, 12 to 15-month project



Q & A

More info:

Venema Creek Natural Drainage System Project

www.seattle.gov/util/VenemaCreek

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